SPR/P

SKARA BRAE, ORKNEY

MAGNETOMETER SURVEY, 1973

This survey made with the fluxgate gradiometer and plotting system covered most of the field to the south and part of that to the west of the excavated site as shown on the enclosed section of the 1:2500 map (plan 1). It was hoped to determine whether the settlement remains would be magnetically detectable and if so to locate any continuation of the site which might occur, but the results are not entirely conclusive.

Thick midden deposits containing organic and burnt materials would be expected to show as disturbed areas of increased magnetic field strength when compared with a background of blown sand, but only a few of the extensive magnetic anomalies visible in the traces plotted from the instrument signal (plan 2) are of this type. One characteristic of the magnetic response from a disturbance at superficial archaeological depths is a noticeable reverse anomaly causing a depression in the traces to the north of the feature. This is present for the anomalies A and B which could represent isolated pits, but is seen in the west field to be absent from the strong east-west feature which continues across the south side of the village. The depression of the traces at the north edge of the survey is caused by the metal fence alongside. This east-west anomaly might indicate a large filled-in ditch but it has various side branches and does not appear to enclose the site. The lack of any reverse anomaly except that due to the fence suggests it is more likely to be of deep-lying geological origin, perhaps an igneous intrusion in the old red sand-stone.

A number of other small anomalies of doubtful but possibly archaeological significance are outlined as are two areas of magnetic activity to the east of the survey. These latter show something of the disturbed character to be expected from an occupation site but are separated from the known remains by a magnetically quiet area. The features marked by dashes, C, have reverse anomalies but their erratic course might be considered natural. The sharp narrow deflections in the traces are caused by fragments of iron.

CONCLUSIONS

The survey is affected by uncertain geological factors but it is unlikely that substantial occupation deposits extend inland unless the material is exceptionally non-magnetic. The anomalies A and B and the detached areas of magnetic disturbance at the east of the survey area might have some archaeological significance.

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HY 2219-2319

ORKNEY

ATLANTIC OCEAN

MAINLAND DISTRICT

227 228 229 230 231 232 233 234 235

1

area surveyed

Bay of Skaill

Mean Low Water Springs

Mean High Water Springs

Rock & Shingle

Shingle

Sand

Rock

Drain

Collects

Spreads

Track

Pond

Sinks

Viking Long Cist found 1866

Boat House

Hellia Gibb

Skara Brae

Mill (disused)

Sheep Dip

Sl

Tumulus (site of)

Voydale

BM 9·28m

BM 9·45m

BM 15·91m

Skaill

Flagstaff

Skaill Home Farm

Skaill Cottage

Garricott

Cuppadoe

Well

11·0m

9·1m

7000
2·921ha
7·22

5998
·049ha
·12

8087
1·389ha
3·43

1083
6·416ha
15·85

5200
2·937ha
7·26

3885
·045ha
·11

5586
·154ha
·38

4480
·673ha
1·66

2774
·510ha
1·26

1267
·948ha
2·34

1663
·316ha
·78

3065
6·862ha
16·96

5366
1·779ha
4·39

4559
1·361ha
3·36

8256
·295ha
·73

8655
·255ha
·63

9350
18·536ha
45·81

1053
·944ha
2·33

1549
·624ha
1·55

1142
·206ha
·51

2341
3·557ha
8·79

5345
6·084ha
15·03

9037
·518ha
1·28